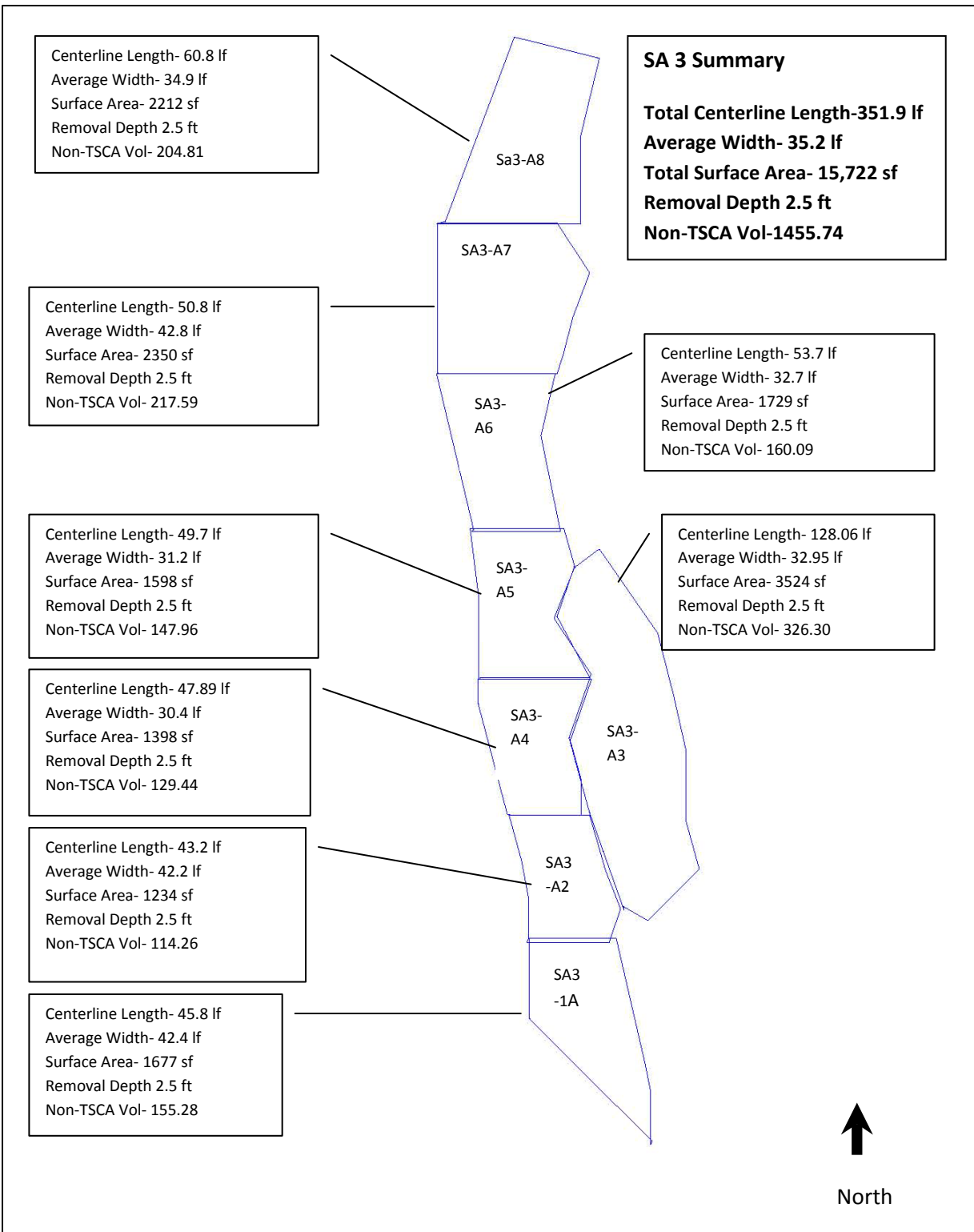


SA3 Basis for Tech Memo Preparation



Measurements are based on August 22, 2012 survey data map provided by Fields Group, volume calculations are based on April 14, 2011 removal depths figure prepared by Fields Group.

1. I am going to assume we will approach the site from the north off Michigan Avenue, and that we clear a path over the old rail road yard (nature Conservancy Property). I believe this could be mostly bush hogging, with small improved road segments as needed if wet conditions are encountered. This could either be timber mats, or gravel/geotextile, whatever approach you would prefer. If we choose to do minimal improvements (i.e. no actual gravel road), we may want to think about purchasing a magnetic bar and suspend from truck or equipment and clear path of small sharp metal to save us tire replacement expense.
2. I also assume we may need to make a curb cut on Michigan Avenue for truck access.
3. We should also plan for trucks entering roadway signs for Michigan Avenue, but since I believe it one way at the general location of entry, we only need to deploy them on the approach side.
4. I would assume, we will be doing the vacuum dewatering, and we expect to get similar results, fairly dry sediment with little or no solidification required. If so, would we load out gravel trains directly from this site with no transfer back to staging area? (Note as of now with no new sample data this is all non-TSCA material)
5. I would assume clearing and grubbing at least 40' back from west side of creek, and 10-20 feet back on east side of creek to accommodate by-pass pumping discharge lines, and even further to get around SA3-3A. (I recall there is a fair elevation change outside flood plain).
6. There is an old bridge on the downstream, were we hoping with further sampling that excavation downstream of the bridge would go away. I assume that regardless we would not excavate under the bridge (did we get structural engineers assessment report, if so please have a copy for me to review?)
7. Any thoughts as to where upstream and downstream cofferdams, ie. Upstream of southern rail road bridge or downstream and I would assume upstream of second rr bridge but downstream of other bridge. Any thoughts on additional cofferdams, since the total length is approximately 351, are you think of any intermediate dam?